CORRES. CONTROL
OUTGOING LTR NO.

93RF8428

DIST.	LTR	ENC
BENEDETTI, R.L.		
BENJAMIN, A.		
BERMAN, H.S.		
BRANCH, D.B.		
CARNIVAL, G.J.		
COPP, R.D.		
DAVIS, J.G.		
FERRERA, D.W.		
HANNI, B.J.		
HARMAN, L.K.		
HEALY, T.J.		
HEDAHL, T.		
HILBIG, J.G.		
KIRBY, W.A.		
KUESTER, A.W.		
LEE, E.M.		
MANN, H.P.	X	
MARX, G.E.		
McDONALD, M.M.		
McKENNA, F.G.		
MONTROSE, J.K.		
MORGAN, R.V.		
POTTER, G.L.		
PIZZUTO, V.M.		
RILEY, J.H.		
SANDLIN, N.B.		
SHEPLER, R. L.		
STEWART, D.L.		
SULLIVAN, M.T.		
SWANSON, E.R.		
WILKINSON, R.B.	X	
WILLIAMS, S. (ORC)		
WILSON, J.M.		
ZANE, J.O.		
BUSBY, W.S.	X	
LAKE, D.Y.Q.	✓	
Houk, Z.	✓	
CORRES.CONTROL	X	X
RECORD CTR. (2)	X	X
TRAFFIC		

CLASSIFICATION

UCNI		
UNCLASSIFIED	X	X
CONFIDENTIAL		
SECRET		

AUTHORIZED CLASSIFIER SIGNATURE

DOCUMENT CLASSIFICATION REVIEW WAIVER PER

DATE CLASSIFICATION OFFICE

IN REPLY TO RFP CC NO: N/A

ACTION ITEM STATUS

☐ OPEN ☐ CLOSED ☐ PARTIAL

LTR APPROVALS:
WSB = [illegible]
ORIG & TYPIST INITIALS
RJH dql

RF-46469 (Rev. 3/93)

TEMP 1034
0000004379

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July 9, 1993 93-RF-8428

R. J. Schassburger
Acting Director
Environmental Restoration Division
DOE, RFO

Attn: B. Thatcher

PROFESSOR HARTHILL TOUR OF OPERABLE UNIT NO. 9 (OU 9) - WSB-297-93

Norman Harthill is Professor of Geophysics, Director of the Center for Potential Fields Studies at the Colorado School of Mines. Contact with Dr. Harthill was initiated by Bruce Thatcher, so that he might provide some expertise on the application of potential fields techniques in locating and tracing buried pipelines.

On Tuesday, June 29, 1993, we conducted a walk-through tour of OU 9. On foot, we traced the alignment of the Original Process Waste Lines through the 400 Area, the 800 Area, the 700 Area of the Protected Area, and the Solar Ponds Area. The entourage consisted of Dr. Harthill, Bruce Thatcher, Joyce Miyagishima, Mike Visocky, and Zeke Houk.

At the conclusion of our tour, Professor Harthill had the following comments and observations:

- The plantsite is a geophysically hostile environment.

- Of the various techniques available, electromagnetic methods are out unless you send a tuned signal through the pipe by conduction or by running a wire through the pipe.

- In many instances, we probably would not detect the pipes directly...instead we would be seeing the trench, backfilled with sand and gravel. Specifically, the use of microgravity techniques are a possibility. Formerly, gravity methods have always seemed slow and painstaking. However, newer instrumentation is much more rugged, very sensitive, and can take a reading in a couple of minutes.

- A magnetometer is simply not workable on OU 9 - there is far too much electromagnet noise.

ADMIN RECORD

DATE 8-30-93

A-0009-000-18

We are taking Dr. Harthill's comments under advisement. During the preparation of the Field Sampling Plan we will consider how use of these techniques may benefit the Phase I Remedial Investigation. We also discussed that an in-field demonstration would be the preferred method of determining the applicability of these geophysical methods. For example, we could evaluate tracing buried pipelines by tuned signals once the pipe are accessible via test pits.

Dr. Harthill can be reached at 273-3423, or FAX to 273-3278.

W. S. Busby
Acting Director
ERM/Remediation Project Management
EG&G Rocky Flats, Inc.

RJH:dql

Orig. and 1 cc - R. J. Schassburger

cc:
J. Miyagishima - Jacobs Engineering